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10/670,772

09/26/2003

Young-Hun Choi

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08/12/2004

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EXAMINER

WALSH, DANIEL I

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,772

Applicant(s)

CHOI, YOUNG-HUN

Examiner

Daniel I Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-23 is/are allowed.
- 6) ☒ Claim(s) 1-17 and 24-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilicich et al. (US 5,877,483) in view of Huang et al. (US 2003/0126483).

Re claim 1, Bilicich et al. teaches a card (20) containing personal information (col 3, lines 30+), a computer system (interpreted to include a display unit) that reads the personal information from the card and determines whether the computer system (including display) will be turned on/off (col 4, lines 10+).

Though Bilicich et al. is silent to the card includes a smart card, the Examiner notes that replacing the magnetic stripe card, with a smart card, is an obvious expedient, and well within the skill in the art. Smart cards are well known to have enhanced storage capacity and security, for example. Further, though Bilicich et al. is silent to an actual display unit reading the card, the Examiner notes that it is well known and conventional that displays/monitors are part of computer/display systems. Accordingly, forming in one piece an article/system that has formerly been formed in pieces and put together involves only routine skill in the art. As a power control means for powering a computer system (including a display) has been taught above, it interpreted as functionally equivalent, and well within the skill in the art.

Huang et al. teaches a smart card used to power up a computer system (FIG. 1).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Bilicich et al. with those of Huang et al.

One would have been motivated to do this to have an access system that is more technologically advanced, therefore being able to be more secure, store more data on the cards, etc.

Re claim 2, the Examiner notes it is well known and conventional to have a display microcomputer and smart card controller, in order to interface between devices of a computer system, as is well known and conventional in the art. The Examiner notes that controllers and microcomputers/processors are well known electronics, and their implementation produces expected results, and therefore is obvious. Additionally, the Examiner points to Huang et al., and controller 16 and display microcomputer (broadly interpreted as state machine 21).

Re claim 3, the Examiner notes that ISO-7816 standards specify the contact/terminals of smart cards. Accordingly, it is well known that they include contacts for clock signals and reset signals, sent to/from their appropriate terminals, typically from a controller/processor.

Re claim 4-6, the limitations have been discussed above re claims 1-3. It is understood that an interface is provided and a signal is detected. Further, it is well known that computer systems include controllers/processors, which control the systems operation, as discussed above. Such means are well known to produce expected results, and are therefore obvious.

Re claim 7, Bilicich et al. is silent to registering personal identification information that is stored in the smart card, or deleting such information. However, the Examiner notes that it is well known and conventional in computer programming/science that when information is read

from a card and is compared to information stored in system, that the data read from the card is stored on the system, either in a buffer memory or to a variable, and then a comparison is done from the buffer/variable (efficiency is increased). As such practice is well known and conventional, it meets the limitations of registering personal information in the smart card. Additionally, in an alternative interpretation, the Examiner notes that it is well known and conventional to delete records, for example when users leave a bank or leave a system and their accounts are to be deactivated. Such deletion is typically performed by an authorized administrator/user of a system, with enhanced privileges/access, and when done locally is done through the controller/processor of the system (see Huang et al. paragraph [0024] where it is taught that information is registered in the bios prior to login, which is interpreted as storing information (registers information). Accordingly, it is understood that such information can be deleted as well. Such modification is obvious to provide accurate records for user authentication.

Re claims 8-9, the Examiner notes that it is well known and conventional to store smart card data from a card when comparing it to data on the system as discussed above.

Re claim 10, Bilicich et al. teaches turning off the system (including display) (Step 314).

Re claim 11, the limitations have been discussed above. The examiner notes that the display is turned off when the smart card is not inserted into the monitor after a predetermined time (immediately; step 312, FIG. 2, FIG. 3 Bilicich et al.). Further, the Examiner notes that Bilicich et al. teaches waiting predetermined amounts of time before logging a user off a system, and therefore it would be obvious to give more/less time to the user to insert their card, before powering down, as a convenience, while still providing security (by shutting down after the time). Such modification is well within the skill in the art.

Re claim 12, though Bilicich et al./Huang et al. is silent to passive smart cards, the Examiner notes that passive smart cards (those requiring powering from an external source) are well known and conventional. One would be motivated to use passive smart cards for many reasons, including form factor constraints, longevity, reduction of parts/costs, etc. It is obvious to supply power to the card prior to reading the information, in order to be able to read the information.

Re claim 13, the limitations have been discussed above, where the card information is compared to stored information to see if a match/authorization is present (step 204/206 Bilicich et al., and Huang et al., as mentioned above).

Re claim 14, reading of personal identification information from the card has been discussed above (see claim 7-9). It has been discussed above that information in the computer system is used to authenticate the personal information (validate the user). The Examiner notes that storing information in a system to validate a user (authentication) is well known and conventional for users registered in a system, so that they can be authorized to use access restricted systems via cards. Also, as presented above re claims 8-9, the Examiner notes that it is well known and conventional to store information in the storage unit for authentication (according to well known practices in computer programming/science) in order to conduct an efficient comparison between data to authenticate a user by storing card information to a variable/memory of the system in order to complete a computer comparison.

Re claims 15 and 17, though the prior art is silent to deleting information from the storage unit, it is well known and conventional that user accounts/cards/information can be deleted from a system by an authorized person/user/system administrator. It would be obvious to

delete information in order to keep systems up to date. Further, the Examiner notes, as discussed re claim 9, that storing card data to carry out a comparison, includes storing data on the system (whether a buffer or temporary variable) in order to complete a comparison process. Such storing means are well known in computer science programming, and therefore well within the skill in the art, and include deleting data after the comparison is complete.

Re claim 16, the limitations have been discussed above re claims 7-9.

Re claims 24, the limitations have been discussed above. Bilicic et al./Huang et al. teach a detector circuit detecting the smart card (interface 12 Huang et al.). Though silent to a passive card (power provided by a circuit to the smart card), the Examiner notes that it is well known and conventional to have passive/active smart cards. One of ordinary skill in the art would be motivated to use passive smart cards, for reasons that include reduction of parts, longevity of the card, reduction of card costs, etc., as discussed above. With regard to a smart card controller providing signals to/from the smart card through terminals, it is well known and conventional to do so, especially in light of ISO-7816 standards. The Examiner notes (as discussed above re claim 8), that in verifying/registering a user to log in, personal information (access information) is stored in a storage unit, when a comparison between data on a card and stored data is made (such as storing the card information in a buffer or variable in order to complete the comparison). Finally, the Examiner broadly interprets the state machine 21 (Huang et al.) to include a monitor microcomputer that receives an insertion signal (signal indicating a valid card has been inserted, in order to power up the system).

Re claim 25, the limitations have been discussed above re claim 6.

Re claim 26, the limitations have been discussed above re claim 11.

Re claims 27-31, the limitations have been discussed above re claims 14-15.

Allowable Subject Matter

2. Claims 18-23 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Re claims 18-21, the prior art is silent to a monitor connected to a system, comprising a controller implementing an on screen display region, displaying registration and deletion buttons of the personal identification information and an authentication result from checking the personal identification information, and turning the display of the monitor on or off based on the authentication result, when the detector determines insertion of the card.

Re claims 22-23, the prior art is silent to deleting the information in the storage unit if the information is the same as the read information from the card, and registering stored information by reading information from the smart card and storing the information prior to registering.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Choi (US 2004/0129776), Sakamoto et al. (US 2004/0104805), Leivo et al. (US 2003/0128822), Kato et al. (US 5,956,557), Davis et al. (US 2004/0060983), Satoh et al. (US

2003/0055686), Davis et al. (US 2001/0035455), Takeuchi et al. (US 2003/0151600), Wheeler et al. (US 2003/0014372), Wheeler et al. (US 2002/0016913), Murase (US 2002/0013769), Rehwald (2004/0139044), Broussard et al. (US 2004/0138921), Bouknight (US 2004/0117308), Wheeler et al. (US 2004/0005051), Park (US 2003/0200445), Challener et al. (US 2003/0135727), Kuo et al (US 2003/0088780), Hoberock et al. (US 2003/0074575), Ofir (US 2002/0178366), Du et al. (US 2002/0029348), Tan et al. (US 2001/0045451), Grawrock et al. (US 2001/0002487), Nakano (US 6,575,373), White et al. (US 5,410,713), Benton et al. (US 4,901,068), Bouthillier et al. (US 6,012,632), Guez et al. (US 2004/0134992), Wang (US 6,128,744), Hung-yi (US 2003/0191960), McCaughan et al. (US 6,173,282), Boyles et al. (US 6,738,901), Tanikawa et al. (US 2003/0051040), Leih et al. (US 5,969,630), Wakai et al. (US 2002/0091586), Chung (US 2001/0034623), Stefik et al. (US 5,534,975), Yu et al. (US 6,067,621), Mooney et al. (US 5,327,497), Lee et al. (US 2003/0121972), King (US 2002/0020752), Bito (US 4,684,791), Pitroda et al. (US 6,705,520) and Sato et al. (US 5,286,954).

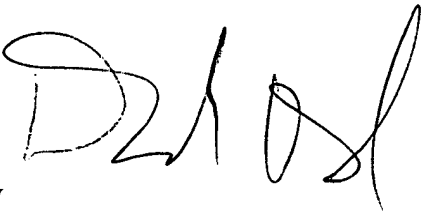
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [daniel.walsh@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



DW
8/2/04



KARL D. FRECHNER
PRIMARY EXAMINER